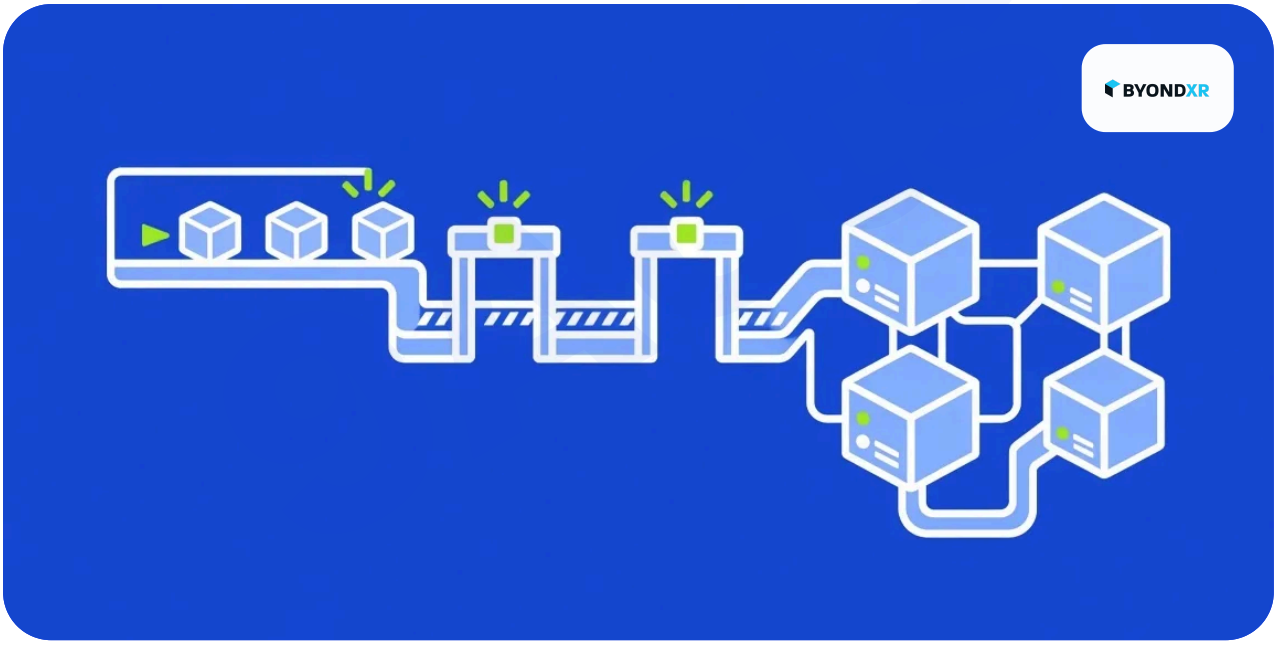
ByondXR

Two projects with ByondXR: its containers moved to Amazon EKS with faster CI/CD to keep up with rapid growth, and real-time shopper analytics on Amazon Kinesis lifted conversions by 20% and cut cart abandonment by 45%.



Before

A fast-growing immersive-commerce platform needing faster, cost-efficient releases and real-time shopper insight.

After

Containers on Amazon EKS with accelerated CI/CD, and real-time analytics on Amazon Kinesis.

About ByondXR

ByondXR is a retail-tech company that has developed an immersive commerce platform to help brands, retailers and wholesalers create unique virtual stores and showrooms in the metaverse. Those stores form a strong and memorable connection between brands and their customers and increase discovery, conversion and retargeting KPIs.

9Acts has worked with ByondXR on two projects: its container platform and real-time analytics.

Containers on Amazon EKS

The challenge

As a platform providing real-time, traffic-sensitive services to virtual stores, ByondXR relies on optimal traffic routing, real-time responsiveness and cost-optimal use of cloud resources. It also needed industry-standard DevOps practices, including infrastructure as code and automated deployments, along with industry-standard compliance.

What 9Acts did

9Acts implemented Amazon EKS as the Kubernetes platform on AWS, so ByondXR deploys faster, scales better, controls traffic granularly and runs multiple containers on a single Amazon EC2 instance. A CloudFormation-based Infrastructure-as-Code setup lets the team create, configure and manage Kubernetes clusters quickly. With 9Acts' ongoing support and management, ByondXR gets Kubernetes' automation, deployment and scaling without the steep learning curve the system normally requires.

9Acts also adjusted the architecture to AWS best practices, modernized the container infrastructure, improved the security posture, and automated security checks and alerts with AWS Security Hub and Amazon EventBridge, with ongoing, proactive cloud cost optimization.

The result

ByondXR now has repeatable container deployments and safe container management, supporting its goal of giving brands, retailers and wholesalers the smoothest entry into the metaverse.

Real-time shopper analytics on Amazon Kinesis

The challenge

ByondXR needed real-time insight into user activity, product interactions and purchasing behavior across its virtual stores. Traditional analytics were too slow and too coarse to personalize recommendations or catch cart abandonment, and the volume of data from millions of users called for a scalable approach.

What 9Acts did

9Acts built the solution on Amazon Kinesis Data Streams, Kinesis Data Analytics and Kinesis Data Firehose, configured for the platform's retail customers.

- **Ingestion.** Kinesis Data Streams captures events from many sources as they happen, so no interaction or transaction is missed.
- **Scale.** Streams absorb surges during flash sales, product launches and peak periods, and shards are added as volume grows.
- **Enrichment.** Kinesis Data Analytics joins raw events with customer profiles, product information and other data using SQL-like queries, for a complete view of user activity.
- **Analysis and alerts.** Queries compute metrics, find patterns and trigger alerts, shown on real-time dashboards.
- **Action.** Insights drive store layout changes, personalized recommendations while shoppers browse, and automated responses to cart abandonment, such as personalized emails.

The result

- **20% more conversions.** Store layouts and experiences tuned on real-time insight, with personalized recommendations that led to more cross-selling and upselling.
- **45% less cart abandonment.** Abandoned carts are spotted at once and followed up automatically.
- **Scaling without effort.** Peak traffic in the virtual stores is handled as data volumes grow.
- **Faster decisions.** Moving from batch processing to real-time analytics lets the platform’s retail customers act on data promptly.

> **Talk to 9Acts about your AWS: contact@9acts.com · 9acts.com/contact**